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Friedrich List and National Development

Working Paper No. 13

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Prepared for Professor John Hall

Abstract: This inquiry seeks to establish that Friedrich List offers an approach to national economic development based upon implementing policies. List conceptualizes and describes a situation wherein the United States, along with Germany and some other Continental European countries, face challenges dissimilar to Britain. List emphasizes an alternate approach towards national development that flies in the face of Adam Smith’s laissez-faire, free-trade prescription, focusing instead upon the powers of production that he suggests, offer a proper measure of a nation’s wealth. List is a limited protectionist who advocates for national policies suited to a nation based upon its history and level of development. List theorizes that there are four stages of national economic development, advocating free trade in only the first and fourth stages, contending that free trade in the interim stages could prove harmful to a nation’s economic development. List proposes national policies and measures, demonstrating how these might lead towards the realization of a nation’s powers of production.

***Journal of Economic Literature* Classification Codes:** B1, B31, N6

Key Words: Friedrich List, Germany, Innovation, National System of Political
Economy, United States

This inquiry seeks to establish that Friedrich List proposed policies for national economic development. These policy proposals appeared in his most famous work, *National System of Political Economy* [1841]. In this book List (1928) establishes his opposition to laissez-faire prescriptions advocated in classical economics.

Though List holds that worldwide free trade among nations would become the ideal situation in the distant future, he teaches us that nations pass through four stages in their economic development, and that a nation's policies should correspond to their current stage. Only in the first and last stages does List advise engaging in so called "free" trade. List shows that engaging in free trade during the intermediate stages could indeed hamper a nation's progress as it seeks to move through the stages. History demonstrates this in the cases of France, the United States, and Germany. Once a nation has reached economic maturity, as exemplified by Britain in List's day, then those mature nations will tend to engage in free trade. Ultimately, in List's view, all nations will achieve levels so that they can engage in free trade. In addition, international law will rule, people will live in freedom, and permanent peace will be preserved among all nations. In fact, List suggests that nations united in economy and commerce may very well unite into a single worldwide political entity.

List proposes that a nation's wealth should be measured not in gold, as the mercantilists held, nor in commodities, as List views J. B. Say and Adam Smith as

espousing, but in *production powers*. List's national system of political economy is a system that he offers for a nation to follow in order to develop its economy to an advanced level, encompassing agriculture, manufacturing, and commerce.

List (1928, 37) asserts, "[T]he forces of production are the tree on which wealth grows." List puts forth his Theory of Productive Powers as a guide for all nations to attain prosperity.

List versus Smith

List recognizes Adam Smith's landmark work, *An Inquiry into the Nature and Causes of the Wealth of Nations* [1776], and that its laissez-faire prescriptions had prevailed in his day as the consensus theory among leading economists and policy-makers. However, List (1928, 108 & 118) expresses the conviction that while Smith's prescription proved beneficial to Britain, it simultaneously proved detrimental to other nations, not similarly situated. Free trade, List argues, would hinder developing nations from fostering domestic manufacturing. This is because infant domestic manufacturing enterprises cannot successfully compete against Britain's mature and efficient manufacturing industry. Britain's manufacturers have developed over time and are refined, and able to produce and export less expensively than European or North American industries can manufacture

domestically. Therefore, free trade would crush these nations' infant industries and deny these nations the opportunity to develop manufacturing power.

List views Adam Smith as having omitted an important one-third of economics: national economics. List (1928, 97) is critical that Smith's writings address the economy of the individual and to the economy of the world, but as if the world were one unified people with equally-distributed manufacturing capability and equal ability to benefit from free trade.

List views the economics of the individual and the economics of the entire world as two extremes and holds that the important field of economics in the middle deals with the economics of a nation, so-called *national economics*. List first writes specifically about the United States in a series of letters published under the title *Outlines of American Political Economy* [1827] (1996). He later writes his most famous work, *National System of Political Economy* [1841], specifically, in part, concerning his native Germany, but in general enough terms that the book is quickly translated into several foreign languages and its prescriptions embraced by other European countries interested in developing their manufacturing base and in surviving against England's attempts at economic domination until that development could take place.

List comes out as an opponent of the practice of free trade on the basis that underdeveloped nations are not yet ready for foreign competition. List (1928, 107)

maintains agreement with Smith that free trade is ideal, but holds that if it were implemented before a nation's manufacturing sector were mature, then free trade would result in a country's markets being dominated by stronger countries with more mature manufacturers (e.g., England), and, thus, their national interests would be undermined. List promotes free trade *within* a country, but tariffs between countries to protect infant industries.

List suggests that Smith's prescription is fine for Britain, but that Britain did not get to its pre-eminent position relative to other countries by following Smith. List (1928, 29-46, 90-91) notes that Britain had followed a nationalistic policy of promoting its economic self-interests through acts of government, including tariffs, strategic colonization, naval dominance and control of shipping lanes, and internal free trade. Only because Britain's manufacturing industries became mature and superior is Smith's prescription of free trade now the next step in advancing its national economic self-interest. Other countries, with infant industries, would be better to follow the nationalistic *path* of Britain, rather than the Scotsman's prescription for Britain's next level of achievement. In other words, countries who would follow the laissez-faire theory of open markets and tariff-free trade would be playing into Britain's hand, helping Britain to climb, at their own country's expense.

A nation wishing itself to climb must start at the lower rungs of the ladder and consider free trade a distant future ideal to which to aspire when it, too, possesses mature or superior domestic industries. In the meantime, List (Hirst, 1965, 313) explains, its extant infant industries must be protected from destruction by inexpensive imports through moderate tariffs. Later, as industries mature, these tariffs could be lowered and, ultimately, eliminated, so that domestic industries would continue their maturation and improvement through competition.

Consumers would pay more during this temporary period of protection but would be rewarded by ending up with robust domestic industries. Nationalism for any nation would be promoted, because manufacturing power is the true measure of a nation's wealth. With manufacturing industries, any nation, even if devoid of commodities or gold, could soon have commodities, gold, and the power to earn more through its manufacturing industries. Not only were the mercantilist's wrong about gold being the measure of a nation's wealth, but Smith, too, was wrong thinking that an abundance of commodities comprised wealth. Manufacturing power is the source of wealth and should be regarded as the measure of a nation's wealth, in the view of List (1928, 117). List's system, then, is about how a nation develops its powers of production to produce wealth for itself.

According to List, Germany's situation is quite different from Britain's, rendering free trade beneficial to Britain, but detrimental to Germany. This is

because, according to List (1928, 62-72, 91), Germany lacks mature industries that would be able to compete with inexpensive British imports. And the development of domestic industries is hampered by Germany's lack of unification and national identity, its numerous taxing jurisdictions, its internal tariffs, its lack of transportation infrastructure, and its lack of a national commercial policy. Not every nation is where Britain is in its economic evolution.

America, too, is in a different economic stage from that of the U.K. List (1928, 77-86, 92) explains that America's manufacturing industries are back in an infantile stage again, because they are unable to maintain a domestic market for their goods against the superior industrial power of Britain's manufacturers, who can provide manufactured goods to American consumers at lower prices. This demonstrates that America's situation is different from that of Britain.

Italy has a rich history of commerce and industry dating back to the revival of European civilization. List (1928, 3-9) cites Italy's long history of abundant fisheries, favorable climate, fertile soil, and a long lineage of artisans and craftsmen. List further notes that trade with the East and proximity to Greece have historically benefitted Italy. Despite this, Italy now is weak. Her independent cities were not banded together politically in defense of Italy as a nation, and the Italian cities were conquered and placed under a monarchy that deprived them of vital freedom. Without freedom, the productive power of people cannot be released;

therefore, the nation's vibrant commerce declined. In addition, various epochs in which Venice alternately subscribed to free trade and protectionist tariffs did not necessarily match the best policy at the right time. Now, in List's day, Italy is wholly incapable of competing with Britain in the area of manufactured goods, even in Italy's domestic market. Italy's state is clearly different from the state of Britain in its economic development.

In List's view, each nation's economy passes through four stages of development: (1) pastoral life; (2) agriculture; (3) agriculture and manufacturing; and (4) agriculture, manufacturing, and commerce. List (1928, 29-46) examines the national history of Britain to demonstrate that it passed through these stages. Having arrived at stage four, Britain is ready for free trade with the rest of the world. Indeed, Smith's prescription is wholly applicable to his home island; however, the remaining nations are not similarly situated, and, thus, Smith's prescription, if followed by those nations, will prove injurious to their development of productive powers.

Criticizing Smith

List acknowledges Smith's doctrine, but also observes and considers the national policies that Britain employed that were precursors to its economic dominance in Smith's day. List (1928, 29-46 & 218-226) notes that these include a strong nation-

state; internally free markets; colonies abroad; and energies of its people. Though mercantilism fell out of favor after Smith's book was published, List demonstrates that certain aspects of mercantilism were positive and played a crucial role in the rise of Britain as the world's foremost economic power. These policies led Britain to possess mature manufacturing industries with strong domestic markets and industrial superiority. Britain has differentiated herself from other nations through a set of policies that fueled her ascension.

List feels that Smith's book fails to live up to the word *Nations* in its title. List (Hirst, 1965, 152) sees that Smith's book discusses the wealth of the individual or firm and speaks to the wealth of the world as if the world were one unified economy. But, List calls these "two extremes" that neglected the middle link, the nations. List (1928, 97-100) views Smith as following Quesnay and J. B. Say in predicating theories on the assumption of one world market; however, such a "cosmopolitical" view ignores the present reality of the world's political divisions: nations. The cosmopolitical theory is based on "the assumption that all nations form one society living in perpetual peace," List contends, a situation that does not exist, which makes the theory inapplicable.

Britain's manufacturing dominance was originally rooted when England began to domesticate sheep and produce wool. List (1928, 30-31) observes that Britain's ascension involved protections instituted by Queen Elizabeth to protect

the English wool industry from foreign competition. The supremacy of England in woolen goods was reflected as early as the reign of King James I, when woolen goods constituted 90% of English exports, which dominated markets in Russia, Sweden, Norway, and Denmark. This industry gave rise to the British coal industry, then to shipping and naval capacity, fisheries, etc. All branches of manufacturing grew up around England's woolen industry, forming England's foundation for greatness in industry, commerce, and even naval power.

List (1928, 35-36) points out that “England prohibited the import of the goods dealt in by her own factories, the Indian cotton and silk fabrics” in 1721, and “[t]he prohibition was complete and peremptory (absolute).” While England would sell to Europe the inexpensive but very fine silk and cotton from India, it would not import to England a single thread. Wouldn't Adam Smith think that this is foolish? Yes, List suggests, according to Smith's (and Say's) Theory of Values. But, List introduces his own theory, the Theory of the Powers of Production. List demonstrates that England had the foresight not to pursue cheap goods, but to pursue enduring manufacturing ability, a source of power. The result was the development of a silk and cotton industry in England that, by List's time, is supplying all of Europe and *even India*! In exchange for sacrificing for a century the opportunity to purchase silk and cotton goods more cheaply from India than England was able to produce them herself, England eventually gained a superior

industry that gives her great international power. Meanwhile, she deprived the nations of the Continent of developing their own textile industries, by profiting from the resale of Indian textile goods to Europe in the interim. The European countries, not protecting themselves from inexpensive Indian imports, undermined any hope of developing their own domestic silk and cotton manufacturing industries, because they couldn't compete with the low prices of imports from India, which British mariners gladly provided to them at a profit.

The biggest problem with Smith's theory, in List's assessment, is its oversimplification. List summarizes that Smith's theory suggests that a nation ought to (1) implement division of labor and (2) practice free trade. Then, *viola!*, wealth will result. But, free trade only benefits countries with a comparative advantage, and Britain possesses that advantage in manufacturing (and France, in wine), according to List. In other words, List (1928, 295-296) faults Smith's theory for ignoring the time dimension and the historical development of a nation through time. The needed policies and institutions evolve through time as the nation progresses from stage to stage of economic development. When it has successfully arrived at its most mature stage and possesses superior powers of production that are able to compete in the world market with the manufacturers of other countries with mature economies (e.g., Britain), then free trade becomes the policy appropriate to its stage of economic development.

List (1928, 77-86) expresses confidence that history proves his theories to be correct. Britain followed a protectionist path to reach manufacturing superiority and economic dominance. When America was fighting for independence, a robust domestic manufacturing sector was spawned; however, after the war, America allowed Britain's inexpensive imports to destroy her own domestic industries. Again, during the War of 1812, and for a year or two after, when by law British imports were proscribed, American industry flourished. Thereafter, when barriers were removed, American industry was again decimated. Smith's theory was pervasive and persuasive, and, when adopted and applied by the United States, *did not* lead to America's advancement in powers of production. America has proven twice that the needed results *will not* follow from Smith's prescription.

France, too, came to ruin under free trade. But, now, in List's time, France's protectionist policies are resulting in success of its domestic industries serving an all-important domestic market, List (1928, 56-61) observes. Whereas, the free trade of Smith's prescription failed France, protections, which List prescribes in his national system, have revived France and allowed her to rise to second standing, behind Britain, in her industrial power.

As a professor of political economy in Germany, List did not want to teach the precepts as they stood in the state of the art of the science of political economy, especially the prevailing theory of laissez-faire. Instead, List (1928, xi) wanted to

teach his pupils what political economic policies and measures would be required to make Germany a strong and unified country and would promote its welfare. International free trade would prove ruinous to Germany. Ununified, its various principalities charge tariffs within Germany! Some merchants pay fifteen separate tariffs crossing just a section of the country. Though List argues strongly that unification of the nation and elimination of internal tariffs are vital, domestic manufacturing has not been fostered to the point that it could hope to compete against British imports arriving tariff-free. If Germany were to adopt Smith's prescription, it is easy to see the fate of Germany's manufacturers – they would come to ruin just as America's did by adopting free trade after the War of 1812 had ended.

List clearly concludes that Smith's prescription is applicable in the present day only to Britain. Though it may soon apply to France and someday will apply to all nations with well-developed manufacturers, the current time requires not a blanket prescription for all nations, but a specific prescription for each nation rooted in a historically sound and scientific theory of national political economy. Only in this way, can nations of the world establish for themselves vibrant manufacturing industries and possess the power of production.

List's Proposals for Economic Development

List advances this general principle: “A nation is rich and powerful in the proportion in which it exports manufactures, imports raw materials, and consumes tropical products.” In this description, List (Hirst, 1965, 310) paints a picture of the end to which his national system is the means.

In rough parallel to the four stages of national economy we mentioned in section one, List outlines four “distinct periods” of economic development of a nation through international trade. List (Hirst, 1965, 311) describes these in his Introduction to his *National System of Political Economy*. In the first period, manufactured goods are imported, while agricultural products and raw materials are exported. This fosters the development of domestic agriculture beyond the limitations of the home market. In the second period, domestically manufactured products (protected by a moderate tariff) arise side-by-side with foreign imports. In the third period, the domestic market becomes dominated by domestically-produced manufactured goods. In the fourth period, “large quantities” of domestically-produced manufactured goods are exported, while agricultural products and raw materials are imported.

One might say that List set himself apart from other authorities in political economy by thinking “four-dimensionally.” List (1928, 29-46) seriously considers the three-dimensional geography of the world, and the importance of navies,

shipping lanes, protected commerce, and strategic colonies granting a nation access to the West Indies and to key trading partners from whom to source raw materials. But he also considers the time dimension of our world and the historical development of the world's nations. Of import in List's system is how institutions must change over time to accommodate the then-current needs of the nation's economy and to provide the platform for the economy's next stage of growth and evolution. The desired results for a nation can be summed up as *productive powers*, from which will flow products, wealth, and prosperity. List asserts that his national prescription, and not Smith's, will lead a nation to possess productive powers.

List intends to fulfill the promise that he sees Adam Smith as having left unfulfilled. Smith provided a prescription, but it wasn't for the nations to build their wealth. Smith's prescription was for Britain to build its wealth, and it would eventually apply to other nations only if those nations first built domestic manufacturing industries. And that would require a different prescription – a truly national prescription – which List provides through his national system.

List's national system prescribes policies to promote the wealth of a nation by nurturing its powers of production. The specific prescription is unique to each country. List explains his system and its prescriptions both in general terms and specifically. In general terms, a nation can assess at what stage of development it finds itself, then institute the policies that the system prescribes for nations at that

stage. Use of the prescription will promote the development of the nation's economy to the next stage. In specific terms, List examines Britain, France, America, and Germany, among other nations, and specifically assesses their stage and articulates his prescriptive policies and measures for their advancement in developing their own productive powers.

First, and foremost, List (1928, 113) prescribes education. List's system emphasizes the importance of human intellectual capital. While manufacturing produces a product, training and instruction produce productive powers within a nation's people, and this is vastly more valuable. List holds in high esteem the vocation of the instructor, whose efforts produce productive powers. Thus, a nation is advised to establish institutions of education as its first step toward creating a future in which that nation shall possess powers of production.

Second, a nation will unleash the productive potential of its educated people by granting them freedom and security. According to List (1928, 113), history demonstrates that when people are free, productive powers of a nation flourish. In the absence of a free people, a nation will never possess productive powers. Intellectual freedom, property rights, and protections are essential elements of freedom, creating an environment in which individuals' productive powers will be released to build a nation's productive powers, and its wealth.

Next, having established freedom and education, List suggests that a nation must implement remaining foundational institutions – both social and economic institutions. These, according to List (1928, 113; Hirst, 1965, 306-309), include unity of the nation, a national spirit, a postal system, money, a system of weights and measures, calendars, watches, law enforcement institutions, free trade within the nation, and tariff-free import of manufacturing inputs, including agricultural products and raw materials. All imports and exports should be free of tariffs at this stage, including imported manufactured goods and exported raw materials and agricultural products. List explains that laws and institutions provide citizens with safety, security of possessions, and “free scope” for their intellectual powers and physical abilities. He calls for a deliberate absence of all institutions (such as slavery and the feudal system) that work against industry, freedom, and the people’s creative use of their intelligence and their morale.

Upon the above foundation, a nation should find its agricultural sector able to flourish. It should export raw materials and agricultural products to the more advanced manufacturing nations, developing a transportation system of roads and railways, as well as commercial ships, along with a navy. This is how a country prepares itself to begin to develop a manufacturing sector to its economy. It is built on the foundation of conducive societal institutions, a strong agricultural sector, and an effective transportation infrastructure. Until this foundation is built, and

agriculture is flourishing, the nation should *avoid tariffs on imported manufactured goods*. Tariffs, List (Hirst, 1965, 312) teaches, are “premature” until a nation’s agricultural sector is at full steam and is providing the needs of its domestic market and exporting vigorously. List recommends free trade for countries that are “at a low level of intelligence and culture.” Implementing tariffs to protect infant domestic manufacturing industry is premature and harmful at this stage, according to List. Protective measures should be reserved, explains List, until the “intellectual, political, and economic education has advanced as a consequence of free trade” and the nation has become ready to foster its own manufacturing.

List (Hirst, 1965, 309) emphasizes that the first major milestone is reached when a nation has attained an advanced state of agriculture with robust export that has matured to the point that it has reached an optimum level of agricultural export. This constitutes fulfillment of the first phase of economic development. Industry now can take root.

The second phase of economic development described by List is characterized by the nurture of a domestic manufacturing industry under a protective system of gradually increasing tariffs on imported manufactured goods. List (1928, 103) is a limited protectionist, believing that temporary tariffs are needed for the maturation of infant industries. A gradual transition to moderate tariffs on imported manufactured goods will protect and foster domestic

manufacturing. List (Hirst, 1965, 311), labels it “madness” to restrict agricultural imports in an attempt to protect domestic agriculture. Manufacturing, the key source of national power, depends upon the free inflow of both domestic *and* foreign agricultural products and raw materials. Therefore, tariffs should not inhibit this free inflow, because to do so is tantamount to inhibiting manufacturing.

In the third phase, List (Hirst, 1965, 311) describes the domestic market for manufactured goods being supplied predominately by domestic manufacturers who have competed successfully side-by-side with foreign imports under a protective system of stable, moderate tariffs.

In the fourth phase, List (Hirst, 1965, 311) describes that “large quantities” of domestically-produced manufactured goods are exported. Agricultural products and raw materials continue to be imported, as ever-increasing manufacturing operations look to domestic and foreign suppliers for inputs, including agricultural products and raw materials. In this most advanced period, List prescribes that governments should begin the gradual reduction of import tariffs on competing manufactured goods until the tariffs are eliminated entirely. This, in List’s view, is necessary in order for domestic industries to continue to improve by the power of competition.

This, then, is List’s system, in general terms, for the nations aspiring to possess powers of production. List also offered specific prescriptions.

In publishing *National System*, List advocates tariff protections for Germany's infant industries in order to promote their maturation. If faced with direct competition from England's mature manufacturing enterprises, Germany's producers would be unable to compete and, therefore, unable to survive. List (1928, xxxv-xxxvi) insists that a nation has an interest in ensuring that it has strong industry; hence, protections are needed. England's manufacturing supremacy threatens to overwhelm Germany. List advocates a blend of tariffed imports and domestically-manufactured goods to meet consumer demand. List states that a nation's economic policy should be characterized by an uncompromising commitment to maintaining a "foundation of national industry," and Germany's demonstrated commitment will pay dividends in the form of powers of production, and the wealth that flows therefrom.

List specifically proposes five national measures within Germany. First, List (1928, xxxvi) suggests a nationally-run transportation infrastructure consisting of railways, river transport, and a canal system. Second, List offers the idea of a strong German fleet and steamship lines. Third, he proposes commercial trade treaties with the Netherlands, the U.S., and other countries. Fourth, he advocates that Germany establish colonies abroad. Fifth, List promotes a single, unified German identity under a single German flag.

In future years, List would be honored throughout Germany by a postage stamp bearing his likeness with the image of a railroad behind him, because he is credited in Germany for his tireless advocacy of transportation policy, which brought the German railroad into existence. By 2019, Germany would be the leading economy in Europe and the fourth largest economy in the world; the United States, which passed strong tariff protections during List's visit to America in part due to his influence, would become the world's largest economy.

This inquiry has sought to establish that Friedrich List offers an approach to national economic development through implementing policies. These policies are a specific prescription in alternative and in contrast to the laissez-faire prescription of Adam Smith and his followers. List maintains that only through this historically sound, and scientific system of national economy can all nations realistically hope to prosper through their possession of the powers of production. Then, they can engage in mutually beneficial free trade, live in prosperity, harmony, peace, and freedom, and explore by what next mechanism all humanity can transcend nationality to form a single unified world, and extend peace in perpetuity.

Appendix A: The LIST National System of Political Economy

Four periods of national economic development are described by Friedrich List.

L – Land should be used for agriculture (transitioning from the pastoral stage).

This is the first period. Expand the nation's agricultural sector both domestically and through export, in exchange for manufactured goods.

I – Industrial manufacturing arises side-by-side with agriculture. Industry uses domestic agricultural products and raw materials, and it imports as necessary to supplement its needs. It serves the domestic market, competing with the help of protective tariffs against imported manufactured goods.

S – Sales in the domestic market favor domestically-manufactured goods. The manufacturing industry has matured to the point that it is ready for export and for tariffs to be phased out.

T – Trading freely, the nation's economy has reached the pinnacle, and its manufacturers are able to compete internationally to export goods and to sell them at home, free of tariffs. Meanwhile, strong domestic agriculture and transportation industries flourish. Citizens enjoy freedom and happiness. Nations live at peace with other nations in this coalition. Ultimately, all nations will reach this pinnacle and will then bond politically in a federation of nations, making war obsolete.

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